

Platelet Rich Plasma

Platelet rich plasma (PRP) is a therapy that utilizes a patient's own blood elements to stimulate a healing response within a damaged tissue or joint. This form of therapy is known as "orthobiologics" in which cutting edge technology combines with the body's intrinsic ability to heal itself.

PRP has been utilized in the medical field for over 20 years, initially for dental patients. Orthopedics is just one of many fields that find this treatment effective to enhance tissue recovery. Most tendons have the ability to heal after injuries, but some recovery periods can take significantly longer due to differences in tissue quality and blood supply (poor vascularization). Treatment strategies like PRP might improve this healing.

How does it work?

Blood is comprised of many types of cells (red, white, plasma and platelets). Research has proven that, in addition to helping blood clot, platelets are activated by injured tissues and consequently release growth factors. These growth factors stimulate a powerful healing response in the body. By injecting these healing components into injured/damaged tissue, the body's natural healing capacity is accelerated. This may lead to a more rapid and efficient tissue recovery.

How is PRP therapy performed?

A small amount of blood is drawn from the arm. Then, a processing machine separates the platelet rich plasma components (with the growth factors) from the other cells. Next, the body tissue or joint to be injected is cleaned and the PRP is injected with a needle into the targeted area. Sometimes additional injections may be required (weeks apart) depending on the severity and chronicity of the problem.

What can PRP treat?

Shoulder

- Rotator cuff partial tears and tendonitis
- *research in progress for use of PRP combined with rotator cuff repairs
- Acromio-clavicular joint arthritis
- Biceps tendonitis
- Golfer's and Tennis elbow (medial and lateral epicondylitis)

Knee

- Bursitis
- Patellar tendonitis
- Medial and lateral collateral ligament sprains/tears
- *research in progress for use of PRP combined with ACL reconstructions

Hip

- Greater trochanteric bursitis
- Sacroiliac joint pain

- Hamstring tendonitis/tears
- Piriformis syndrome

Foot/Ankle

- Plantar fasciitis
- Ankle sprains
- Achilles tendonitis/partial tears
- Shin splints

Back

- Arthritis
- Disc herniations
- Ligament sprains

Safety and Side Effects

PRP injections are very safe and carry minimal risks of infection or complications. A temporary soreness to injection site is to be expected, as part of the healing response. Because PRP uses a patient's own blood, there is no risk for disease transmission. Current research suggests that PRP may have antibacterial protection against possible infections.

Vishal Mehta, M.D.

Director of Cartilage Restoration, Fox Valley Orthopedic Institute
President, Fox Valley Orthopedic Research Foundation
Naperville Sports Medicine and Cartilage Restoration Center

Cassie Mandala, MPAS, PA-C

Sports Medicine Physician Assistant, Fox Valley Orthopedic Institute